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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,637	03/18/2004	Hiroto Okawara	CANO:132	5358
37013	7590	05/14/2007		
ROSSI, KIMMS & McDOWELL LLP. P.O. BOX 826 ASHBURN, VA 20146-0826			EXAMINER KHAN, USMAN A	
			ART UNIT 2622	PAPER NUMBER
			MAIL DATE 05/14/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/803,637	Applicant(s) OKAWARA, HIROTO	
	Examiner Usman Khan	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statements (IDS) submitted on 3/18/2004 and 10/31/2005 have been considered by the examiner. The submission is in compliance with the provisions of 37 CFR 1.97.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objection

Claims 2 - 9 are objected to because of the following informalities: each of these dependent claims should start with "The". Appropriate correction is required.

Drawings

Figure 10 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in

Art Unit: 2622

compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim(s) 11 is/are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 11 defines a program embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). That is, the scope of the presently claimed program can range from paper on which the program is written, to a program simply contemplated and memorized by a person.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1, 4 – 6, 8, and 10 – 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Sato et al. (US patent No. 5,832,318).

Regarding **claim 1**, Sato et al. teaches an image pickup apparatus (column 7 lines 32 *et seq.* and column 8 line 13 *et seq.*, camera), comprising: a focus lens (figures 1 and 12 focus lens group L4; also column 9 lines 4 *et seq.* focusing with lens group L4); a rotatable ring member (figure 1, item 3 and figure 12, item 33; also column 4 lines 30 – 44 MF ring and column 9 lines 13 - 25 MF ring); a detection device that detects a rotating operation state of said ring member (figures 1 and 12, items 4 and 34, respectively; MF ring detecting means 4 and 34 respectively detects the rotating direction, the operation amount (rotation angle) and the rotating speed of the MF ring 3 and 33 respectively and transmits information on the results of detection to the CPU 5 and 35 respectively); a control device that causes said focus lens to be moved and stopped in an optical axis direction thereof based on results of the detection by said detection device (figures 1 and 12, items 5 and 35, respectively; MF ring detecting means 4 and 34 respectively detects the rotating direction, the operation amount (rotation angle) and the rotating speed of the MF ring 3 and 33 respectively and transmits information on the results of detection to the CPU 5 and 35 respectively which

in turn leads to the items 7 and 40 respectively); and a responsiveness control device that controls responsiveness of linear changes in focus to the rotating operation state of said ring member detected by said detection device in accordance with at least depth of focus (column 6 lines 22 *et seq.* depth of field, column 10 lines 28 – 58 focusing sensitivity due to the object distance, and column 8 lines 20 - 52 focusing due to detection for example landscape mode).

Regarding **claim 4**, as mentioned above in the discussion of claim 1 Sato et al. teaches all of the limitations of the parent claim. Additionally, Sato et al. teaches that the responsiveness control device controls responsiveness of a linear focusing movement amount of said focus lens as the responsiveness of linear changes in focus (figures 1 and 12, items 5 and 35, respectively; MF ring detecting means 4 and 34 respectively detects the rotating direction, the operation amount (rotation angle) and the rotating speed of the MF ring 3 and 33 respectively and transmits information on the results of detection to the CPU 5 and 35 respectively which in turn leads to the items 7 and 40 respectively for moving the focus lens group).

Regarding **claim 5**, as mentioned above in the discussion of claim 1 Sato et al. teaches all of the limitations of the parent claim. Additionally, Sato et al. teaches that the responsiveness control device controls responsiveness of a linear focusing speed of said focus lens as the responsiveness of linear changes in focus (figures 1 and 12, items 5 and 35, respectively; MF ring detecting means 4 and 34 respectively detects the

Art Unit: 2622

rotating direction, the operation amount (rotation angle) and the rotating speed of the MF ring 3 and 33 respectively and transmits information on the results of detection to the CPU 5 and 35 respectively which in turn leads to the items 7 and 40 respectively).

Regarding **claim 6**, as mentioned above in the discussion of claim 1 Sato et al. teaches all of the limitations of the parent claim. Additionally, Sato et al. teaches that the said detection device comprises a photoelectric conversion type sensor (column 7 lines 32 *et seq.* and column 8 line 13 *et seq.*, camera, it is inherent that the camera includes a photoelectric conversion type sensor to convert the incoming light into electrical signals).

Regarding **claim 8**, as mentioned above in the discussion of claim 1 Sato et al. teaches all of the limitations of the parent claim. Additionally, Sato et al. teaches that the ring member is disposed in concentricity with an optical axis of said focus lens, and is mechanically disconnected from the focus lens (figure 1 and 12).

Regarding **claim 10**, Sato et al. teaches a control method for an image pickup apparatus (column 7 lines 32 *et seq.* and column 8 line 13 *et seq.*, camera) including at least a rotatable ring member (figure 1, item 3 and figure 12, item 33; also column 4 lines 30 – 44 MF ring and column 9 lines 13 - 25 MF ring), a detection device that detects a rotating operation state of the ring member (figures 1 and 12, items 4 and 34, respectively; MF ring detecting means 4 and 34 respectively detects the rotating

Art Unit: 2622

direction, the operation amount (rotation angle) and the rotating speed of the MF ring 3 and 33 respectively and transmits information on the results of detection to the CPU 5 and 35 respectively), and a control device that causes a focus lens to be moved and stopped in an optical axis direction thereof based on results of the detection by the detection device (figures 1 and 12, items 5 and 35, respectively; MF ring detecting means 4 and 34 respectively detects the rotating direction, the operation amount (rotation angle) and the rotating speed of the MF ring 3 and 33 respectively and transmits information on the results of detection to the CPU 5 and 35 respectively which in turn leads to the items 7 and 40 respectively), the control method comprising a step of controlling responsiveness of linear changes in focus to the rotating operational state of the ring member detected by the detection device in accordance with at least depth of focus (column 6 lines 22 *et seq.* depth of field, column 10 lines 28 – 58 focusing sensitivity due to the object distance, and column 8 lines 20 - 52 focusing due to detection for example landscape mode).

Regarding **claim 11**, Sato et al. teaches a control program for causing a computer to execute a control method (column 12 lines 47 - 51) for an image pickup apparatus (column 7 lines 32 *et seq.* and column 8 line 13 *et seq.*, camera) including at least a rotatable ring member (figure 1, item 3 and figure 12, item 33; also column 4 lines 30 – 44 MF ring and column 9 lines 13 - 25 MF ring), a detection device that detects a rotating operation state of the ring member (figures 1 and 12, items 4 and 34, respectively; MF ring detecting means 4 and 34 respectively detects the rotating

direction, the operation amount (rotation angle) and the rotating speed of the MF ring 3 and 33 respectively and transmits information on the results of detection to the CPU 5 and 35 respectively), and a control device that causes a focus lens to be moved and stopped in an optical axis direction thereof based on results of the detection by the detection device (figures 1 and 12, items 5 and 35, respectively; MF ring detecting means 4 and 34 respectively detects the rotating direction, the operation amount (rotation angle) and the rotating speed of the MF ring 3 and 33 respectively and transmits information on the results of detection to the CPU 5 and 35 respectively which in turn leads to the items 7 and 40 respectively), the control method comprising a step of controlling responsiveness of linear changes in focus to the rotating operation state of the ring member detected by the detection device in accordance with at least depth of focus (column 6 lines 22 *et seq.* depth of field, column 10 lines 28 – 58 focusing sensitivity due to the object distance, and column 8 lines 20 - 52 focusing due to detection for example landscape mode).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US patent No. 5,832,318) in further view of Norita et al. (US patent No 6,906,751).

Regarding **claim 2**, as mentioned above in the discussion of claim 1 Sato et al. teaches all of the limitations of the parent claim. Additionally, Sato et al. teaches that the image pickup apparatus comprises: an optical lens group including said focus lens (figures 1 and 12 focus lens group L4; also column 9 lines 4 *et seq.* focusing with lens group L4); a recording device that records a picked-up image picked up via said optical lens group onto a recording medium (it is inherent that there is a recording device for saving the images picked up in the camera), and wherein said responsiveness control device controls the responsiveness of linear changes in focus to the rotating operation state of said ring member detected by said detection device (figures 1 and 12, items 5 and 35, respectively; MF ring detecting means 4 and 34 respectively detects the rotating direction, the operation amount (rotation angle) and the rotating speed of the MF ring 3 and 33 respectively and transmits information on the results of detection to the CPU 5 and 35 respectively which in turn leads to the items 7 and 40 respectively).

However, Sato et al. fails to disclose that the responsiveness control device is controlled in accordance with the depth of focus that has been corrected based on a pixel density of the picked-up image and a pixel density of a recorded image to be recorded onto the recording medium. Norita et al., on the other hand discloses that the responsiveness control device is controlled in accordance with the depth of focus that has been corrected based on a pixel density of the picked-up image and a pixel density of a recorded image to be recorded onto the recording medium.

More specifically, Norita et al. discloses that the responsiveness control device is controlled in accordance with the depth of focus that has been corrected based on a

Art Unit: 2622

pixel density of the picked-up image and a pixel density of a recorded image to be recorded onto the recording medium (figures 24 – 26; column 3 lines 8 et seq. and displaying and recording in accordance with a focus).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Norita et al. with the teachings of Sato et al. because in column 2 lines 10 – 16 Norita et al. teaches that the camera has a function of making a judgment of whether the memory has enough free space for a new image signal to be stored; and a memory controller for erasing the oldest one of already-stored image signals from the memory if the memory has not enough space, and storing the new image signal there by there is always space for new images to be stored. Also, Norita et al. teaches in column 3 line 65 – column 4 line 2 that the camera has a function to shorten the time involved in the preliminary imaging to thereby reduce time required before the actual imaging.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US patent No. 5,832,318) in further view of Examiners Official Notice.

Regarding **claim 3**, as mentioned above in the discussion of claim 1 Sato et al. teach all of the limitations of the parent claim. However, Sato et al. fails to teach that the responsiveness control device controls the responsiveness of linear changes in focus to the rotating operation state of said ring member detected by said detection device in accordance with exposure time.

The examiner takes Official Notice that it is old and well known in the art to have a focus operation in accordance with an exposure time.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a focus operation in accordance with an exposure time to account for brightness problems in the images to be focused.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US patent No. 5,832,318) in further view of Okawara (US PgPub 20020041334).

Regarding **claim 7**, as mentioned above in the discussion of claim 7 Sato et al. teaches all of the limitations of the parent claim.

However, Sato et al. fails to disclose that the detection device comprises a magnetic type sensor. Okawara, on the other hand discloses that the detection device comprises a magnetic type sensor.

More specifically, Okawara discloses that the detection device comprises a magnetic type sensor (figures 12 and 13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Okawara with the teachings of Sato et al. because in paragraph 0058 Okawara teaches that the invention improves operation performance and feeling of a control system without mechanical coupling between the operation member and lens, by optimizing the relationship between the operation of an operation member and a lens drive/stop operation.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US patent No. 5,832,318) in further view of Applicants admitted prior art.

Regarding **claim 9**, as mentioned above in the discussion of claim 7 Sato et al. teaches all of the limitations of the parent claim.

However, Sato et al. fails to disclose that the focus lens comprises an inner focus type lens unit. Applicants admitted prior art, on the other hand discloses that the focus lens comprises an inner focus type lens unit.

More specifically, Applicants admitted prior art discloses that the focus lens comprises an inner focus type lens unit (page 1 lines 18 - 22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Applicants admitted prior art with the teachings of Sato et al. because in page 1 lines 18 - 22 Applicants admitted prior art teaches that the use of a inner focus type lens units can realize cost reductions, system simplifications, and reductions in the size and weight of a lens barrel.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

OHKAWARA (US patent No. 6,731,339) teaches a rotary ring on a camera used to control functions of the camera.

Sato et al. (US patent No. 5,771,410) teaches a rotary ring on a camera used to control functions of the camera.

Hirasawa (US patent No. 5,315,340) teaches a rotary ring on a camera used to control functions of the camera.

Kawanami (US patent No. 5,278,601) teaches a rotary ring on a camera used to control functions of the camera.

OHKAWARA (US PgPub 2002/0075395) teaches a rotary ring on a camera used to control functions of the camera.

Mikamo (US PgPub 2003/0160891) teaches a rotary ring on a camera used to control functions of the camera.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usman Khan whose telephone number is (571) 270-1131. The examiner can normally be reached on Mon-Thru 6:45-4:15; Fri 6:45-3:15 or Alt. Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Usman Khan
05/02/2007
Patent Examiner
Art Unit 2622



DAVID OMETZ
SUPERVISORY PATENT EXAMINER